



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Diyun Huang et al. Art Unit : Unknown
Serial No. : 10/625,371 Examiner : Unknown
Filed : July 23, 2003
Title : POLYMERS HAVING PENDANT NONLINEAR OPTICAL CHROMOPHORES
AND ELECTRO-OPTIC DEVICES THEREFROM

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

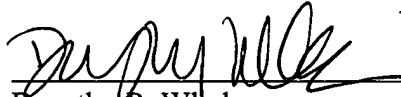
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2. Form PTO-1449 (3 pages);
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Date: 1/15/04



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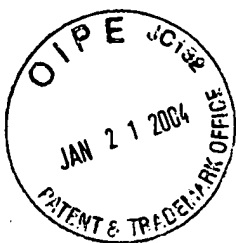
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Heidi Bathrick
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INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

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1/15/04

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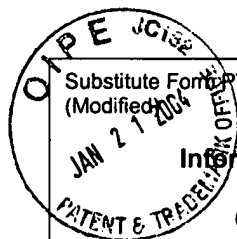
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U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	4,028,702	06/07/1977	Levine			
	AB	4,258,386	03/24/1981	Cheung			
	AC	5,041,516	08/20/1991	Frechet et al.			
	AD	5,051,754	09/24/1991	Newberg			
	AE	5,198,513	03/30/1993	Clement et al.			
	AF	5,207,952	05/04/1993	Griffin, III			
	AG	5,223,356	06/29/1993	Kumar et al.			
	AH	5,266,365	11/30/1993	Kester et al.			
	AI	5,353,033	10/04/1994	Newberg et al.			
	AJ	5,359,008	10/25/1994	Amano et al.			
	AK	5,395,556	03/07/1995	Drost et al.			
	AL	5,433,895	07/18/1995	Jeng et al.			
	AM	5,520,968	05/28/1996	Wynne et al.			
	AN	5,635,576	06/03/1997	Foll et al.			
	AO	5,670,091	09/23/1997	Marder et al.			
	AP	5,679,763	10/21/1997	Jen et al.			
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	AR	5,714,304	02/03/1998	Gibbons et al.			
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	AU	5,811,507	09/22/1998	Chan et al.			
	AV	5,861,976	01/19/1999	Hoekstra			
	AW	6,067,186	05/23/2000	Dalton et al.			
	AX	6,090,332	07/18/2000	Marder et al.			
	AY	6,126,867	10/03/2000	Kanitz et al			
	AZ	6,130,339	10/10/2000	Tan et al.			
	AAA	6,197,921	03/06/2001	Tan et al.			

Date Considered

Substitute Disclosure Form (PTO-1449)

Substitute Form PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark OfficeAttorney's Docket No.
14414-010001Application No.
10/625,371**Information Disclosure Statement
by Applicant**

(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant
Diyun Huang et al.Filing Date
July 23, 2003

Group Art Unit

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ABB	6,228,977	05/08/2001	Kanitz et al.			
	ACC	6,294,573	09/25/2001	Curtin et al.			

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	ADD	4401911	08/03/1995	DE				
	AEE	4416476	11/16/1995	DE				
	AFF	19532828	03/21/1996	DE				
	AGG	0414185	02/27/1991	EP				
	AHH	0637774	02/08/1995	EP				
	AII	0729056	02/24/1995	EP				
	AJJ	0754709	01/22/1997	EP				
	AKK	08108624	04/30/1996	JP				
	ALL	2000089268	03/31/2000	JP				
	AMM	2001085713	03/30/2001	JP				

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	ANN	March, "Classification of Reactions by Type of Compound Synthesized", <u>Advanced Organic Chemistry Reactions, Mechanisms, and Structure</u> , 1992, 4 th Edition, John Wiley & Sons, New York, pp. 1269-1300.
	AOO	Chen et al., "Thermosetting Polyurethanes with Stable and Large Second-Order Optical Nonlinearity", <u>Macromolecules</u> , 1992, 25(15):4032-4035.
	APP	Gorman et al., "An Investigation of the Interrelationships Between Linear and Nonlinear Polarizabilities and Bond-Length Alternation in Conjugated Organic Molecules", <u>Proc. Natl. Acad. Sci. USA</u> , 1993, 90(23):11297-11301.
	AQQ	Smith et al., "Perfluorocyclobutane Aromatic Polyethers. Synthesis and Characterization of New Siloxane-Containing Fluoropolymers", <u>Macromolecules</u> , 1996, 29(3):852-860.
	ARR	Kojima et al., "Facile Synthesis of Thiophene Derivatives Using a Cyclopropenyl Cation", <u>Synthesis</u> , 1996, 10:1193-1195.
	ASS	Landmesser et al. "Regiocontrolled C-8 Acylation of Castanospermine", <u>Synthetic Comm.</u> , 1996, 26(11):2213-2221.

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14414-010001	Application No. 10/625,371
	Information Disclosure Statement by Applicant (Use several sheets if necessary)			Applicant Diyun Huang et al.
				Filing Date July 23, 2003

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	ATT	Mao et al., "Progress Toward Device-Quality Second-Order Nonlinear Optical Materials. 1. Influence of Composition and Processing Conditions on Nonlinearity, Temporal Stability, and Optical Loss", <u>Chem. Mater.</u> , 1998, 10(1):146-155.
	AUU	Reinhart et al., "Highly Active Two-Photon Dyes: Design, Synthesis, and Characterization Toward Application", <u>Chem. Mater.</u> , 1998, 10:1863-1874.
	AVV	Bosman et al., "About Dendrimers: Structure, Physical Properties, and Applications", <u>Chem. Rev.</u> , 1999, 9(7):1665-1688.
	AWW	Ma et al., "A Convenient Modular Approach of Functionalizing Aromatic Polyquinolines for Electrooptic Devices", <u>Chem. Mater.</u> , 1999, 11(8): 2218-2225
	AXX	Kim et al., "Nonlinear Optical Chromophores Containing Dithienothiophene as a New Type of Electron Relay", <u>J. Mater. Chem.</u> , 1999, 9:2227-2232.
	AYY	Ma et al., "A Novel Class of High-Performance Perfluorocyclobutane-Containing Polymers for Second-Order Nonlinear Optics", <u>Chem. Mater.</u> , 2000, 12(5):1187-1189.
	AZZ	Ma et al., "Highly Efficient and Thermally Stable Nonlinear Optical Dendrimer for Electrooptics", <u>J. Am. Chem. Soc.</u> , 2001, 123(5):986-987.
	AAAA	Raimundo et al. "Push-Pull Chromophores Based on 2,2'-Bi(3,4-ethylenedioxythiophene) (BEDOT) π -Conjugating Spacer" <u>Tetrahedron Letters</u> , 2001, 42:1507-1510.
	ABBB	Luo et al., "Design, Synthesis, and Properties of Highly Efficient Side-Chain Dendronized Nonlinear Optical Polymers for Electro-Optics", <u>Adv. Mater.</u> , 2002, 14(23):1763-1768.
	ACCC	Liu et al., "Focused Microwave-Assisted Synthesis of 2,5-Dihydrofuran Derivatives as Electron Acceptors for Highly Efficient Nonlinear Optical Chromophores", <u>Adv. Mater.</u> , 2003, 15(7-8):603-607.

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